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ESD-TR-67-632

ELECTRONIC SYSTEMS DIVISION HANDBOOK  
FOR  
SCIENTIFIC AND TECHNICAL INFORMATION (STINFO)



Mary A. Rives, Captain, USAF  
Alfonzo L. Walls, M/Sgt, USAF

March 1968

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## FOREWORD

This handbook is a general reference guide to DOD, Air Force and ESD STINFO Programs for STINFO Officers. Although much of the handbook concerns only ESD, it has been published as a technical report and distributed to DDC in the hope that other STINFO organizations may find such a guide useful.

This report has been reviewed and approved.

  
PAUL L. DEIMLING, Colonel, USAF  
Chief, Technical Requirements  
and Standards Office

This report supersedes ESD-TR-65-219, dated April 1965.

## ABSTRACT

This report is a general review of the Scientific and Technical Information Program. It was written primarily as a working guide for technical personnel producing or monitoring technical reports and STINFO Officers at the SPO and laboratory level. The report includes Department of Defense, Air Force and Air Force Systems Command policies, regulations and information sources; publication of reports; and release and distribution of reports.

# THE SCIENTIFIC AND TECHNICAL INFORMATION (STINFO) PROGRAM

## I. BACKGROUND

The wealth of effort and money spent on Research and Development (R&D) has produced a fantastic volume of data. To be of value this treasure of information must be published, sorted, abstracted, indexed and made available in the shortest time possible. Distribution and use of this information has been a major national problem for some time. The Department of Defense (DOD), in particular, has a problem because of its large share of the national R&D funds. In 1963, the DOD established the STINFO Program to create an efficient exchange of information and to eliminate duplication and wasted money and time caused by incomplete or tardy scientific and technical information. There was no lack of information, but it was improperly distributed and announced. A large percentage of vitally important data was lost in file cabinets and not available to those who needed it. The primary purpose of the DOD STINFO Program is: (1), to insure that scientific and technical information generated by Research, Development, Test and Evaluation (RDT&E) Programs is used to provide the maximum contribution to the RDT&E advancement of science and technology, and (2), to improve the RDT&E processes of upgrading the efficiency of management activities at all levels from policy and staff elements to field activities.

The STINFO Program defined information functions, established objectives, functions, and responsibilities. It established mandatory format standards for reports, emphasized timely distribution of data and exchange of ideas, moved the Armed Services Technical Information Agency (ASTIA) to DOD level and redesignated it the Defense Documentation Center (DDC). It further established criteria for information centers and, in general, built a logical foundation for an orderly and rapid exchange of scientific and technical information. DOD directed that STINFO organizations be established in all services to implement these instructions.

## II. THE DEFENSE DOCUMENTATION CENTER (DDC)

DDC is the focal point and secondary distribution agency for DOD STINFO. It acquires, stores, announces, retrieves, and provides secondary distribution of DOD STINFO documents to all DOD components and other government agencies and to their contractors, grantees, and potential contractors. DDC also maintains DD Forms 1498 (Research and Technology Resume). DDC, can, from this store of information, furnish individual reports (1 to 15 copies), give subject bibliographies of reports available from DDC, or furnish lists of people or organizations working in specific subject areas.

DDC announces new reports in a classified Technical Abstract Bulletin (TAB) published bi-monthly. These TABs are available to all qualified DDC users. DDC has recently been empowered to conduct an active acquisition program and it is now mandatory for DOD departments to send all technical reports (except those specifically excluded) to DDC on initial distribution. DDC is the most complete and up-to-date source of DOD sponsored technical information. This service is available to any DOD agency or contractor with an established DDC account. Contractors must have an established need-to-know, in each particular subject area, to receive classified documents in that area. Need-to-know by subject area is not required for military agencies.

All DDC services are based on the number and quality of data received from the field. If DDC is not actively supported by field agencies such as ESD, and does not receive prompt delivery of all qualified new reports, they cannot in turn furnish timely or complete information to requesters. The entire STINFO Program is based on support and use of DDC, and this, therefore is a primary responsibility of STINFO personnel.

### III. THE CLEARING HOUSE FOR FEDERAL SCIENTIFIC AND TECHNICAL INFORMATION (CFSTI)

In 1964, the Department of Defense and the Department of Commerce signed an agreement that Commerce's information agency CFSTI (formerly OTS) would process all DOD unclassified, unlimited reports for DDC. CFSTI now handles the processing and distribution of all these reports submitted to DDC. Because CFSTI sells these reports to the general public, unclassified reports going to DDC must be carefully reviewed and marked if release to CFSTI is not authorized. Release restrictions and applicable regulations will be discussed later. DDC retains all unclassified documents which are restricted. This arrangement between DDC and CFSTI does not affect service to field agencies. All documents are still furnished to DOD agencies and contractors cost free and such requests are still to be submitted to DDC, not CFSTI.

Under a new policy of the DOD, the TAB will no longer carry duplicate announcements of DOD scientific and technical reports appearing in U. S. Government Research and Development Reports (USG RDR), an abstract journal published by the Clearinghouse for Federal Scientific and Technical Information. All announcements of unclassified, unlimited distribution documents, formerly carried in the white section of TAB, will henceforth be furnished only in USG RDR.

#### IV. CENTERS FOR ANALYSIS OF SCIENTIFIC AND TECHNICAL INFORMATION

The STINFO Program also established Information Analysis Centers as DOD-wide functions serving both DOD and DOD Contractors. These centers differ from DDC and libraries as they are primarily concerned with information analysis rather than document processing. The primary function of these centers is to keep DOD technical personnel fully informed on the latest and best state-of-the-art information by collecting and evaluating published and unpublished literature and by contact with leading scientists in their specialized fields. Each center has a clearly defined, specialized area of interest. These centers gather literature from world sources, and evaluate, condense, analyze and compare the available information. To meet user requirements, this data is reduced from highly condensed information for management, to detailed information for scientists and engineers. Each center will answer specific questions asked by DOD personnel.

#### V. THE AIR FORCE STINFO PROGRAM

A. The Air Force established the Air Force STINFO focal point responsibility office (Hq OAR/RRY) and implemented the DOD STINFO Program by Air Force Regulation 80-29, "The Scientific and Technical Information (STINFO) Program." This regulation establishes the basic organization and policies for Air Force STINFO, for symposia and technical meetings, and use of the DDC. It requires that each Air Force activity performing an RDT&E function establish a STINFO office at each headquarters, division, center, laboratory, SPO and major project office. The regulation states that each STINFO office will promote the transfer of scientific and technical information resulting from its RDT&E efforts by (1), fostering the exchange of information by technical meetings and symposia, journal articles and personal visits; and (2), promoting the use of the DDC and information centers before and during the work effort, requiring the project engineer or scientist to make a comprehensive survey of all pertinent and technical literature during project planning and to use the DDC index of RDT&E effort, to preclude duplication of effort; and (3), distributing all STINFO documents to the DDC, appropriate technical libraries, and information centers.

This regulation also specifies a basic format and a DD Form 1473, "Document Control Data - R&D" which is required for every report sent to DDC. See Figure I.

##### B. OFFICE OF AEROSPACE RESEARCH (OAR)

This Air Force organization has an active STINFO Program to support AFR 80-29. All OAR Reports go to DDC and receive wide distribution. OAR has written a pamphlet, "The Author's Guide for Technical Report" OAR 64-8

Security Classification

**DOCUMENT CONTROL DATA - R & D**

*(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)*

1. ORIGINATING ACTIVITY (Corporate author)

2a. REPORT SECURITY CLASSIFICATION

2b. GROUP

3. REPORT TITLE

4. DESCRIPTIVE NOTES (Type of report and inclusive dates)

5. AUTHOR(S) (First name, middle initial, last name)

6. REPORT DATE

7a. TOTAL NO. OF PAGES

7b. NO. OF REFS

8a. CONTRACT OR GRANT NO.

9a. ORIGINATOR'S REPORT NUMBER(S)

b. PROJECT NO.

c.

9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)

d.

10. DISTRIBUTION STATEMENT

11. SUPPLEMENTARY NOTES

12. SPONSORING MILITARY ACTIVITY

13. ABSTRACT

(available from DDC, AD 605 443) which is a fine guide for writing and preparing a report. There are, naturally, parts of the pamphlet which do not apply to Systems Command organizations, but as a general writing guide it is excellent. OAR's Cambridge Research Laboratory, located at Hanscom Field, maintains a very fine geophysics and electronics library. They have 180,000 volumes and 200,000 plus, technical and scientific reports. Limited loan privileges are available to ESD personnel.

## C. THE AFSC STINFO AND RELATED PROGRAMS

The Air Force Systems Command implemented the STINFO Program with specific operating instructions, AFSCR 80-20, "The AFSC Technical Report Program." AFSCR 80-20 covers policy and standards for the publication of AFSC scientific and technical reports in addition to those required by AFR 80-29.

### I. AFSCR 80-20, "The AFSC Technical Report Program"

This regulation defines technical reports (TRs) as reports that record the results of scientific and technical efforts accomplished or sponsored by AFSC organizations in their RDT&E processes. Included are in-house efforts and work performed by contractors, subcontractors and grantees. Reports may be definitive, exploratory, or a record of inconclusive or negative findings. Included are final reports; significant interim or progress reports; test and evaluation reports (Category I and Category II for example); and any data believed to be of potential value to other organizations; solutions to specific problems; state-of-the-art advancement; and journal articles.

The definition of a TR is necessarily general; it is not always possible to define what would be of value. In the case of border-line reports, the judgement must rest with the project officer. There are cases when a Military Specification requires a different format than that required by AFSCR 80-20. In this case, if the report is valuable, the format requirements of AFSCR 80-20 are waived. Note that AFSC specifies negative findings for TRs. These can be as valuable, or more valuable, than positive findings if they prevent another organization from wasting time and money on the same subject. Reports excluded from the requirements of AFSCR 80-20 include: management; operational; financial; administrative; data of very temporary value; engineering and logistics data (technical orders, specifications, manuals); intelligence; special access; top secret; and planning studies.

AFSCR 80-20 requires that technical reports be identified in the planning stages of proposed programs, tasks, or projects, and that at least one report be published to document the results of each research and exploratory development project or task. It delineates the review and approval procedures

for draft reports, time limits for publication, numbering procedures and distribution policies. Attachment 2 to AFSCR 80-20 specifies exact format requirements for technical reports including editorial organizations, preparation, and publication. This attachment includes all the format requirements of AFR 80-29 and was written to be used for either in-house or contractual reports.

## 2. AFSCM 310-1, "Management of Contractor Data and Reports"

This manual standardizes acquisition of systems data. Its purpose is to identify, select, acquire, control, and keep to a minimum the data required from contractors. It contains two volumes: Volume I prescribes policies, procedures and contains general information; and Volume II identifies all data that may be required from a contractor. Each authorized report has a form in Vol. II (AFSC/AFLC Form 9, Data Item) containing preparation and distribution instructions. (See Figure 2.) This manual is related to STINFO because several reports identified in Vol. II have distribution to DDC required on the Form 9. These reports are thus qualified technical reports and will be prepared and numbered as technical reports, per AFSCR 80-20, unless (as stated previously) a particular format is required by a Military Specification. In this case, the report will be numbered as a technical report and will include a DD Form 1473 in the back of the document, but the remainder of the report will meet the standards of the Military Specification.

AFSCM 310-1 prescribes the DD Form 1423 (See Figure 3), Contractor Data Requirements List. This form lists all reports required from a particular contract and becomes a part of the final contract. For programs limited to basic research, exploratory development or feasibility studies the requirement for the DD Form 1423 is only for data requirements other than reports of findings. On those contracts where data requirements are limited to reports of findings, no 1423 is required. Reports of findings include final summary technical reports of work and technical progress reports of work. Using the requirements of AFSCR 80-20 and AFSCM 310-1 the following ESD reports should be published as part of the STINFO system:

- a. R&D Reports: TRs
- b. Systems Data, DD Form 1423
  - (1) System Analysis Report, S-1
  - (2) Weapons Effects, Radiological, Biological Chemical Blast Information, S-2
  - (3) Technical Reports, S-17
  - (4) Environmental Analysis & Progress Reports, S-23
  - (5) Materials R&D Report, S-49
  - (6) Category I Final Test Report, T-117

15 August 1964

AFSCM 310-1A/AFSCM 310-1A

<b>TITLE</b> Technical Reports	<b>NUMBER (Appropriate TSAF block number)</b> S-17-12.0-1
<b>USE</b> A technical report (TR) describes the precise nature and results of scientific or technical research accomplished in completing the contract objectives. They apply to basic research, exploratory development, test and evaluation of materials, equipment, processes, etc. TRs may be definitive for the subject presented, exploratory in nature, or evaluation of critical subsystem or technical problems. They are used not only by the AFSC and its contractors, but are made available to the DOD scientific and technical community through the announcement, storage, retrieval, and distribution facilities of the Defense Documentation Center (DDC).	<b>DATE</b> 15 Aug 1964 <b>OFFICE OF PRIMARY RESPONSIBILITY</b> AFSC <b>DOC REQUIRED</b> X <b>REFERENCES (Authority-Regulation, etc.)</b> AFR 80-29 AFSCR 80-20
<b>INTERRELATIONSHIP</b> Depending on its nature a specific TR may have application to many aspects of a particular program.	
<b>PREPARATION INFORMATION</b> <p>1. The contractor, to include subcontractors, will document by means of a TR the results of significant RDT&amp;E efforts accomplished during contract performance. TRs will be identified and scheduled in the contract; unforeseen break-throughs will be documented as TRs by contract amendment. Special emphasis will be given to document the results of all significant basic research or exploratory development which was accomplished in fulfilling the contract objectives. Significant information is defined as that information which will contribute to advancing the "state-of-the-art" or that information considered to be of potential value to the scientific and technical community.</p> <p>2. The specifications and standards for technical reports attached to AFSCR 80-20 will be made part of a contract which will produce TRs; these specifications may be amended by the AFSC organization by adding local requirements covering such variables as procedures for submitting manuscript, camera-ready copy, or reproduced copies, etc. Where a data item in this Manual is prescribed by a Military Specification, the format of resulting TRs will follow the Military Specification rather than the AFSCR 80-20 specification, but the copies furnished to DDC will contain as a final page a completed copy of DD Form 1473, "Document Control Data - R&amp;D" (instructions are on the reverse of the form which is available through AF publications distribution channels in accordance with AFM 5-4). The distribution of TRs will be prescribed by the responsible AFSC organization in accordance with AFSCR 80-20.</p>	



- (7) Category I Test Report (Computer Program), T-118
- (8) Category II Test Report, T-120
- (9) Radio Frequency Spectrum Characteristics Measurement Report, T-122

c. Journal Articles: These should be numbered and identified per ESD Sup I to AFSCR 80-20.

d. Symposia Proceedings: Proceedings of ESD or ESD Contractor sponsored symposia will be published as Technical Reports.

### 3. Scientific and Technical Liaison Offices

Another organization in AFSC which is closely related to the STINFO Program is the Scientific and Technical Liaison Offices (STLO). These offices provide Air Force technical representation on research and development efforts and other technical endeavors which are the result of, or are of direct interest to the Air Force. The STLOs are a part of the Research and Technical Division (RTD). One of their major responsibilities is keeping Air Force R&D organizations informed of the latest significant events in science and industry. The STLO also assists non-government organizations. The liaison offices can introduce a person to others working in the same field, perform preliminary technical evaluations of R&D proposals, assist small business and perform security functions (arranging clearances and source inspections). The STLO area office at Hanscom Field is located at the Murphy facility. Its specific functions in relation to STINFO are:

a. Render assistance to all echelons of the Air Force in their dealings with the academic, scientific and industrial communities.

b. Assist in technical monitorship of Air Force R&D contracts, upon request.

c. Report non-Air Force sponsored R&D activities conducted by the academic, scientific and industrial communities, and by other government agencies, when not otherwise reported, to interested Air Force agencies.

d. Assist academic, scientific and industrial organizations in applying and qualifying for participation in the Air Force Technical Objective Document (TOD) Program and conducting R&D capability surveys of organizations requesting participation.

#### 4. Foreign Technology

The mission of this organization at each AFSC Division is to acquire, evaluate, analyze and produce foreign aerospace technical information within the scope of the assigned aerospace technological threat and to assure timely impact of foreign aerospace technology on existing and future AFSC division, center, and laboratory planning, research, development and systems acquisition programs. Their mission includes providing data on foreign scientific and technological state-of-the-art. This organization is very important as a source of information and although foreign technology documents, prepared in accordance with AFSCM 200-1 are normally excluded as intelligence reports, certain cleared documents are placed directly in the STINFO structure and sent to DDC.

#### D. ESD STINFO

When AFSC directed that the STINFO Program be initiated, a comparable organization already existed at ESD (The Technical Information Services Division, ESAT). It was decided to retitle this organization, The Scientific and Technical Information Division (ESTI), and designate the chief of the organization STINFO Officer for ESD. At the same time STINFO contact points were designated in each system program office, laboratory, and major project office. Each of the designated contacts is responsible for the STINFO Program in his individual organization (ESD Sup I to AFR 80-29).

#### 1. The Scientific and Technical Information Division, ESTI

ESTI is the ESD focal point for technical information and the Scientific and Technical Information (STINFO) Program. It is responsible for the ESD STINFO Program, for keeping STINFO Officers up-to-date on developments in STINFO, and assuring they are well briefed on their basic responsibilities. ESTI is the OPR for AFR 80-29 and AFSCR 80-20, and responsible for ESD adherence to the policies and report standards of Atch 2, AFSCR 80-20. This includes identification, numeration, indexing, format, and distribution of TRs.

a. ESD Supplement I to AFSCR 80-20 gives explicit reporting patterns for contractor and in-house reports and designates specific responsibilities for ESTI and for individual monitoring offices. It includes instructions for subcontractor reports, journal articles, and contractor reproduction of reports.

b. ESD Contractor Instruction 65-1 is a supplementary contractual document to be used in conjunction with AFSCR 80-20 and AFSC/AFLCM 310-1 for all technical reports. ESD Instruction 65-1 and Atch 2, AFSCR 80-20 will be cited

on each DD Form 1423 in addition to the appropriate AFSC/AFLC Form 9. This instruction contains the requirements of ESD Sup I to AFSCR 80-20 (which cannot be used as a contractual document).

## 2. ESD Technical Reports (TRs)

ESTI is part of the coordination cycle for purchase requests to assure that TRs are properly identified and a correct number of copies are cited on the DD Form 1423. ESTI issues all TR numbers for ESD reports, checks report drafts for correct format (AFSCR 80-20) and release limitations, helps with publication and distribution of technical reports, and with problems of cost, publication methods and release policies. A master file of ESD reports is maintained to answer secondary requests for information. ESTI makes distribution of ESD reports to DDC, and sends the required DD Form 1473 for ESD reports to AFSC. The master distribution list of military organizations interested in ESD efforts is also maintained by ESTI. This list is a reference for initial distribution of TRs.

## 3. ESTI Information Service

ESTI receives primary distribution of scientific and technical reports from national agencies working in fields related to ESD work. These reports are cataloged and listed in a weekly accession list giving source, title, number, date and contract. This list is available to any ESD office. Reports may be ordered citing the Accession List (AL) Number and will be forwarded as available. The Accession List is a valuable reference for new developments in RDT&E. ESTI maintains AL documents for approximately one year. ESTI also maintains reference materials for DDC and NASA.

## 4. Procurement of Publications, ESDR 5-3

ESTI can order scientific publications from different sources for a requester, as specified in ESDR 5-3, "Procurement of Scientific and Technical Publications." These include commercial books and periodicals, Government Printing Office publications, non-fee publications, and Defense Communications Agency (DCA) publications. ESTI maintains the only DDC account for ESD; reports requested should cite the AD Number to speed processing.

## 5. ESD STINFO Officers

The basic responsibilities of the individual STINFO Officers in ESD are:

- a. To assure that his organization complies with AFR 80-29, AFSCR 80-20 and the ESD Supplements thereto.

b. To assure that all possible qualified reports from his organization become part of the STINFO Program and are distributed to DDC (through ESTI).

c. To assure that reports on contracts from his organization are properly identified.

d. To advise project monitors on information sources, procedures and applicable regulations.

e. To assure that the project monitor has timely state-of-the-art information and that DDC bibliographies, etc. have been requested, per AFR 80-29, before a contract is initiated.

f. To assure that personnel in his organization are aware of STINFO and its possible uses.

g. To advise ESTI if a new STINFO Officer is appointed.

h. To be able to answer any questions concerning STINFO reports from his organization.

#### 6. Procedures for ESD Reports

Assuring prompt publication and distribution of data is one of the most important responsibilities of an author or a project officer. Procedures are as follows:

a. Project Monitors: After receiving the draft from a contractor he will:

(1) Obtain an ESD TR number and ESD Form 33 from ESTI.

(2) Review the draft for technical accuracy, conformance to contract specifications and assign the security classification of the title and contents.

(3) Check possible distribution statements for reports, select applicable notices (AFR 310-2).

(4) Determine the distribution to be given the TR.

(5) Complete and sign the ESD Form 33, Technical Report Data.

(6) Submit the draft (for editorial review), the completed ESD Form 33 and the report distribution list to ESTI.

(7) After ESTI completes the review, return the draft with comments to the contractor, and forward a copy of the transmittal letter to the ACO.

b. Authors of In-House Reports: After writing and reviewing the report:

(1) Obtain an ESD TR number from ESTI.

(2) Submit the draft, the completed ESD Form 33, and the report distribution list to ESTI.

(3) Request assistance from ESTI for report preparation, if desired.

(4) After the draft is returned, prepare the manuscript in reproducible photo-ready copy and forward to ESTI for publication and distribution.

c. Checking the Report: When reviewing a report, authors and project monitors should keep the following considerations in mind and check for adherence to these criteria:

(1) Style: A good report should be simple, direct, accurate, and written in a language understandable to its audience. There are several style and writing guides available: AFM 10-4, Guide for AF Writing; OAR 64-8, Author's Guide for Technical Reports; and The Elements of Style by William Strunk, Jr., (MacMillan).

(2) Format: Although ESTI will check the report for conformance to format requirements of AFSCR 80-20, certain portions should be checked by the originator or project monitor:

(a) Is a signed review and approval statement included?

(b) Have correct legal and release notices been selected? The Distribution Statements per AFR 310-2 should be carefully selected to reflect any restrictions placed on the report.

(c) Is the abstract a true reflection of the document content, and is it informative but brief?

(d) Are the keywords selected for the DD Form 1473 (last page of the report) correct? DDC retrieves its reports using the keywords listed on the DD Form 1473 as a reference, so an accurate and complete list of words is important.

(3) Security: Check if the report has been properly classified and the proper group assigned (AFR 205-1 and AFR 205-2). "Highly important to all classification determinations is accuracy. Those who exercise authority to make security classifications must assure that all official information which requires protection in the interests of national defense is judiciously classified. They must guard against under- or over-classification. Assignment or retention of levels of classification not based on currently sound requirements unnecessarily burdens the resources of the Air Force security program, restricts the flow of information to the public, withholds scientific and technical information from use in the development of non-defense activities that benefit the U. S. economy.

"Classifying scientific and technical information requires a particularly broad knowledge of the field involved in order to assess the significance of the particular document or other item. Generally, original classification in this area is applicable only to the results of applied research (exploratory development). Except for Restricted Data information, basic scientific research and its results are not ordinarily classified. However, classification may be required if the information concerns an unusually significant breakthrough when there is sound reason to believe it is not known or within the state-of-the-art of other nations, and it supplies the U. S. with a military or technological advantage. Classification may also be required when the subject matter would provide the U. S. with an advantage in lead time for the potential military or technological application of the research information. In classifying scientific, as well as other types of information, it is important to consider whether it is known that the U. S. has the information or even is interested in it. \*\*\*\*\*This is a period when basic research is rapidly enlarging our fields of knowledge, scientific and technological applications are providing innumerable new devices and methods. Commanders and officials with original or derivative classification responsibility, and each individual who may develop or come into possession of new scientific or technological data, should be keenly aware of its possible defense significance."

If properly classified, then proper marking must be checked. All TRs are "unbound" documents as defined in AFR 205-1, and must be marked accordingly. AFSCR 80-20 (Atch 2, para 25) also gives instructions for marking TRs. Each classified page and paragraph must be marked according to its own content. Particular attention should be given to keeping titles and abstracts of the report unclassified if possible. All classified TRs must be stapled in three places and bound with tape. The espionage notice should appear on the title or first page of the report.

(4) Distribution of Reports: AFR 80-29 lists two types of distribution; primary and secondary.

(a) Primary: This is the initial distribution of a report. AFSCR 80-29 and AFR 80-29 require that each report receive as wide initial distribution as possible. All TRs should be sent to DDC, to those information centers with similar interest, and to those Systems Command organizations and their contractors that require the data to further the AFSC technical effort. Primary distribution should also include other organizations with an interest in related subjects (Air Force, Army, Navy and other government agencies). ESTI maintains a master distribution list of these addressees. Civilian agencies may also be included in initial distribution under certain conditions (see AFSCR 80-20).

(b) Secondary: This means supplying copies to requesters after the original distribution is completed. ESD does not make secondary distribution; however, project officers may be asked to approve secondary requests from DDC and foreign requesters. ESD does not have to furnish copies if they are available from DDC. All reports that are sent to DDC with a statement limiting release must be approved by the ESD Project Officer before DDC will release them, and all foreign requests must be processed through the originating office.

(5) Journal Articles: This is an approved method of publication or reports both contractor and in-house, if they are unclassified with no release restrictions. The reports must be approved for release by the Office of Public Information (ESI) before release to the journal. They must be identified with the contract number, the ESD TR number, AFSC, and the Air Force, and have a reproduction statement included (See ESD Sup I to AFSCR 80-20). Sufficient copies of these reports must be ordered from the journal to make primary distribution and it must be assured that the journal understands that the reproduction statement must be included in the published article. If not, the Air Force may have to buy extra copies of data they originally owned.

Another thing to consider--if the report is very important and should be distributed in a short time, journal release is not recommended. Release through a journal takes much longer than the normal publication cycle.

(6) Release of Reports: There are several things the project monitor or author must consider when determining release of a report. Security, limited (proprietary) or copyright data, and possible foreign release.

(a) Limited (Proprietary): All data rights now fall into two groups: Unlimited (may be used for any purpose), and Limited (cannot be used for competitive procurement). Data for which the government has not acquired full rights when included in TRs must be considered as "For Official Use Only" and protected accordingly. It will not be released to CFSTI or

indiscriminately to contractors. Only such information mandatory to understanding the report should be used in the report. The limited data should be marked by paragraph and any illustrations containing limited data, identified. Any claim by the contractor for limited data should be coordinated and approved in writing by the Contracting Officer and the Judge Advocate before it is included in the report.

(b) Copyright: Copyrighted material will not be included in a report unless the written permission of the copyright holder has been obtained. If the report will be released to DOD contractors or the public, this must be made clear to the copyright owner in the request for release. This material will also be identified and a statement incorporated, "Reprinted from (title of copyrighted work) by (name of author) by permission (name of copyright owner) copyrighted (date)." Prior use of copyrighted material in another government publication does not give any one else permission to use the data. Technical reports with data done entirely under contract to the Air Force will not be copyrighted.

(c) Comparative Data on Commercial Equipment: A report containing comparative data and information on commercial equipment and items not developed on government contract will be released only to DOD agencies.

(d) Test Results on Commercial Equipment: A report containing test results conducted by an AFSC organization of commercial equipment will be released to U. S. Military Agencies. If the equipment of only one manufacturer is tested, he may receive the report with the understanding it will not be used to imply government indorsement.

(e) Planning Studies: Contractor reports containing results of development planning studies will be released to DDC only after release is provided by AFSC. Final evaluation of contractor data, analyzing and evaluating contractor efforts are not normally granted release to DDC, only to other government agencies.

(f) Release of Reports to CFSTI: All unlimited TRs will be cleared through the Office of Public Information as required by ESDR 190-1, however, ESTI will not make distribution to CFSTI. These reports will be forwarded to DDC for disposition.

(g) Foreign Release: Foreign release of ESD reports is governed by several regulations: AFR 200-9, and AFSCM 200-2 cover basic controls and procedures. Call ESTI if there is any question.

(h) Release of Reports to the DDC: All TRs should go to the DDC. Every report, before release, must be marked with an appropriate release notice. Use applicable notices in AFR 310-2. If any limitation notice is used, the

reason will be explained in the Foreword: "The distribution of this report is limited because. . . ." This explanation should be clearly written to assist holders of the report in handling the document and using its information. For example, do not say the distribution is limited because of AFR 400-10 (which means nothing to non-Air Force personnel), instead say the distribution is limited because the report contains technology identifiable with items on the strategic embargo lists excluded from export or re-export under U.S. Export Control Act of 1949 (63 STAT 7) as amended (50 U.S.C. App. 2020-2031) as implemented by AFR 400-10.

It is command policy to make our technical reports broadly available within the limits of security and other regulatory restrictions; therefore, limitations on distribution will be held to an absolute minimum. Procedures will be established to review and remove limitations as soon as possible.

(i) Publications Standards and Costs: Policies and procedures governing Air Force Printing and Duplicating, AFR 6-1, covers both in-house and contractor printing and duplicating. Technical reports must be duplicated, i.e., "The process of producing material from stencils, masters and direct-image plates \*\*\*\*\*provided that not more than 5,000 production units are produced of any page and not more than 25,000 production units (one sheet, size 8 x 10-1/2, one color, one side only) of multiple-page items are produced in the aggregate" \*\*\*\*\*This definition of duplicating specifically excludes printing processes such as reusable contact negatives and/or positives prepared with a camera requiring a darkroom, plate making and presswork, and limits the maximum sheet size to 11" by 17" with a maximum image area of 10-3/4" by 14". AFR 6-1 also states no binding (this means gluing or sewing) or color plates will be used.

Reproduction requirements for reports may be placed on contracts if duplicating is specified and the limitations of AFR 6-1 are met. The production unit limitations of 25,000 units does not apply to jobs of 225 copies or less.

The printing costs scale for reproduction of reports shows cost as follows:

Cost per page (line)	100 copies	\$2.11
	200 "	2.19
	300 "	2.28
	400 "	2.36
	500 "	2.45
	600 "	2.68
	700 "	2.78
	800 "	2.88
	900 "	2.97
	1000 "	3.06
	(Fold Out Page)	4.50

Collating costs run approximately \$2.00 per thousand 8-1/2" x 11" sheets, with a minimum of \$10.00. Tape and staples cost .05 for each report. These figures are all estimates; however, they will let you judge costs of publications. Remember these figures do not include the technical costs of writing and preparing the draft copies, only final reproduction.

## VI. HELPING A CONTRACTOR GET TECHNICAL DATA FOR WORK ON A CONTRACT

After a contract is initiated a contractor often needs various types of data for work on the contract. Helping him get this data in the fastest and easiest manner is an important job for the ACO and project monitor. The contractor should submit requests for regulations, manuals, specifications, etc. through the ACO who will in turn, order them from the proper source. The project monitor to help the contractor should assure a DDC account is established for the contractor. To qualify for DDC, the contractor or grantee must submit to DDC, through his contracting officer and project monitor a properly completed DDC Field of Interest Register (FOIR) (DD Form 1540). This document specifies the particular fields in which the contractor or grantee may request reports from DDC. He cannot obtain DDC service in fields not certified by his military project monitor as pertinent to his contract. This also establishes the contractor for CFSTI service through DDC for unclassified, unrestricted reports. To obtain classified reports, the contractor's military security office must certify to DDC that the prospective user has a current facility security clearance. This clearance confirms to DDC the security level within which the contractor is authorized to receive and store classified information.

When ordering documents, particularly if classified, from other sources the contractor should submit his request through the project monitor who can certify his Need-to-Know.

# DIRECTORY OF INFORMATION SOURCES AT HANSCOM FOR ESD PERSONNEL

WEEKLY ACCESSION LIST OF NEW REPORTS-----	ESTI (Bldg 1210)
DDC REPORTS (HARD COPY)-----	ESTI
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AGENCIES (ORDER)	
SCIENTIFIC AND TECHNICAL PERIODICALS-----	ESTI
SCIENTIFIC AND TECHNICAL BOOKS-----	ESTI
DCA PUBLICATIONS-----	ESTI
ESD TECHNICAL REPORTS-----	ESTI
TECHNICAL LIBRARY SERVICE-----	CRL (Bldg 1103)
NON-MISSION SUPPORT BOOKS-----	Base Library
AND PERIODICALS	
REGULATIONS-----	PDO
MANUALS-----	PDO
TECHNICAL ORDERS-----	PDO
PAMPHLETS-----	PDO
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INTELLIGENCE DOCUMENTS-----	Deputy for Foreign Technology (ESY)
FTD REPORTS-----	Deputy for Foreign Technology (ESY)
MILITARY SPECIFICATIONS-----	Engineering Data Service Center (ESBAR)
MILITARY STANDARDS-----	Engineering Data Service Center (ESBAR)
ENGINEERING DRAWINGS-----	Engineering Data Service Center (ESBAR)

## DOCUMENT CONTROL DATA - R &amp; D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) Technical Requirements and Standards Office Electronic Systems Division L G Hanscom Field, Bedford, Mass. 01730		2a. REPORT SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>
		2b. GROUP N/A
3. REPORT TITLE  ELECTRONIC SYSTEMS DIVISION HANDBOOK FOR SCIENTIFIC AND TECHNICAL INFORMATION (STINFO)		
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)  None		
5. AUTHOR(S) (First name, middle initial, last name) Mary A. Rives, Captain, USAF Alfonzo L. Walls, M/Sgt, USAF		
6. REPORT DATE March 1968	7a. TOTAL NO. OF PAGES 19	7b. NO. OF REFS 0
8a. CONTRACT OR GRANT NO. IN-HOUSE	9a. ORIGINATOR'S REPORT NUMBER(S) ESD-TR-67-632	
b. PROJECT NO.		
c.	9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
d.		
10. DISTRIBUTION STATEMENT This document has been approved for public release and sale; its distribution is unlimited.		
11. SUPPLEMENTARY NOTES	12. SPONSORING MILITARY ACTIVITY Electronic Systems Division, Air Force Systems Command, United States Air Force, L G Hanscom Field, Bedford, Mass. 01730	
13. ABSTRACT  This report is a general review of the Scientific and Technical Information Program. It was written primarily as a working guide for technical personnel producing or monitoring technical reports and STINFO Officers at the SPO and laboratory level. The report includes Department of Defense, Air Force and Air Force Systems Command policies, regulations and information sources; publication of reports; and release and distribution of reports.		

